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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/650,261

08/27/2003

Raymond Kim

20144-003100US

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7590

10/17/2006

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EXAMINER

HINES, JANA A

ART UNIT

PAPER NUMBER

1645

DATE MAILED: 10/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

10/650,261

Applicant(s)

KIM, RAYMOND

Examiner

Ja-Na Hines

Art Unit

1645

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 19 September 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 4 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: None.  
Claim(s) objected to: None.  
Claim(s) rejected: 14-25.  
Claim(s) withdrawn from consideration: None.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: \_\_\_\_\_  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_  
13. ☐ Other: \_\_\_\_\_.

  
MARK NAVARRO  
PRIMARY EXAMINER

The request for reconsideration has been considered but does not place the application in condition for allowance for the reasons discussed below.

The rejection of claims 14-22 and 25 under 35 U.S.C. 102(b) as being anticipated by Greenquist (US Patent 4,806,312 published February 21, 1989) is maintained for reasons already of record. The rejection was on the grounds that Greenquist teaches an apparatus comprising a molecular analyte layer and a film layer wherein the molecular analyte layer comprises a molecular analyte immobilized on a molecular analyte solid support, just as instantly claimed. Applicants argue that an analyte that is immobilized in one layer and specifically binds a ligand to form a complex, which in turn generates a detectable signal is not taught. However, Greenquist teaches a labeled reagent that is incorporated within the device, by being retained in the reagent zone and is free to migrate into the detection zone and capable of being bound to the immobilized interactive detection reagent in the detection zone (col. 5, lines 31-40). The reagent layer is incorporated with a reagent which comprises an immobilized form of the analyte (col. 5, lines 57-61). The labeled reagent can be prebound to the separate reagent zone, since the binding is reversible upon the addition of liquid test medium (col. 10, lines 12-20). The reagent layer is equivalent to the film layer since both the reagent layer and the film layer have an immobilized molecule, as required by the claims. The detection layer is incorporated with an immobilized form of an interactive detection reagent (col. 5, lines 62-65). The detection layer is equivalent to the molecular analyte layer of the instant claims. Both the detection layer and the molecular analyte layer have an immobilized analyte on a solid support.

Applicants argue that the terms, analyte and ligand are not equivalent. In response to applicant's argument that the terms have different functions, is not persuasive since there must be a structural difference in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Applicants argue that and that despite the definition provided by the instant specification, the term molecular ligand should be construed with a narrower definition. Where applicant acts as his or her own lexicographer to specifically define a term of a claim applicant cannot now assert that the term has a different meaning. The term molecular ligand in claim is used by the claim to have the broad definition recited in the specification, contrary to applicants interpretation. Therefore, contrary to applicants assertions, the limitation is taught and applicants arguments are not persuasive.

The rejection of claims 23-24 under 35 U.S.C. 103(a) as being unpatentable over Greenquist in view of Bergstrom et al., is maintained for reasons already of record. Applicants' assert that all of the elements of the claims have not been taught. Therefore, it is the examiner's position that Greenquist has been discussed above and only routine skill would have been required to incorporate hydrogel, since the art already teaches the advantages of hydrogel and matrix forming agarose materials. Thus applicants' arguments about the properties of the labeled reagent are misplaced, since the molecular ligand refers not to the label but to the binding partner. There is no limitation on the number of binding sites on the binding partner.

In response to applicant's argument that there is no suggestion to combine the references, no more that routine skill would have been required in using a well known alternative and functionally equivalent material hydrogel when other matrix forming materials are known in the art to be essential for obtaining a sensing surface and is desirable for aiding protein compatibility and minimizing nonspecific interactions. Therefore, contrary to applicants assertions, the claims are taught and applicants arguments are not persuasive.